

Name: \_\_\_\_\_

**at1113exam: Expand, factor, and solve quadratics (v311)**

1. Expand the following expression into standard form.

$$(2x + 7)^2$$

2. Expand the following expression into standard form.

$$(8x + 7)(8x - 7)$$

3. Expand the following expression into standard form.

$$(4x - 3)(6x + 7)$$

4. Solve the equation.

$$(5x - 9)(2x - 3) = 0$$

5. Solve the equation.

$$8x^2 + 32x + 38 = 3x^2 - 5x - 4$$

6. Solve the equation with factoring by grouping.

$$18x^2 + 15x + 12x + 10 = 0$$

7. Factor the expression.

$$x^2 + x - 56$$

8. Factor the expression.

$$36x^2 - 25$$